

What is claimed is:

1. A colorless UV-absorbing pigment at least partially coated with a synergist having the formula



wherein

- (a) m is 1 to 3, n is 1 to 3, p is at least 1, and q is 0 to 3, and
 - (b) at least one R or R' is a substituent that upon pyrolysis generates a black material suitable for providing a mark.
2. A pigment according to claim 1 wherein m is 2 or 3 and each R is the same substituent.
3. A pigment according to claim 1 wherein m is 2 or 3 and each R is a different substituent.
4. A pigment according to claim 1 wherein at least one R or R' upon pyrolysis produces carbon black, silicon carbide, silicon oxycarbide, or mixtures thereof.
5. A pigment according to claim 1 wherein at least one R is the same as R'.
6. A pigment according to claim 1 wherein at least one of R and R' comprises an aryl group.
7. A pigment according to claim 1 which comprises TiO_2 , ZnO , or ZnS .
8. A composition suitable for laser marking when exposed to radiation from an excimer laser, said composition comprising
 - (1) a fluoropolymer having a processing temperature T_p ,
 - (2) 0.1 to 50% by weight of the composition of a colorless UV-absorbing pigment, and

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- (3) a synergist having the formula



wherein

- (a) m is 1 to 3, n is 1 to 3, p is at least 1, and q is 0 to 3, and
- (b) at least one R or R' is a substituent that upon pyrolysis generates a black material suitable for providing a mark,

said synergist being (i) present at at least 10% by weight of the pigment present in the polymer composition, (ii) heat stable at a temperature of at least T_p , and (iii) in physical proximity with the pigment.

9. A composition according to claim 8 wherein the fluoropolymer is a melt-processible fluoropolymer.
10. A composition according to claim 9 wherein the fluoropolymer comprises PFA, MFA, ETFE, or FEP.
11. A composition according to claim 8 wherein the fluoropolymer comprises PTFE.
12. A composition according to claim 8 wherein the synergist comprises a silsesquioxane or a polyhedral oligomeric (POSS).
13. A composition according to claim 12 wherein the synergist comprises dodecaphenylsilsesquioxane.
14. A composition according to claim 8 wherein the synergist is present at at least 20% by weight of the pigment.
15. A composition according to claim 8 wherein the pigment comprises TiO_2 , ZnO, or ZnS.

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16. A composition suitable for laser marking when exposed to radiation from an excimer laser, said composition comprising

- (1) polytetrafluoroethylene,
- (2) 0.1 to 50% by weight of the composition of a colorless UV-absorbing pigment, and
- (3) a synergist having the formula



wherein

- (a) m is 1 to 3, n is 1 to 3, p is at least 1, and q is 0 to 3, and
- (b) at least one R or R' is a substituent that upon pyrolysis generates a black material suitable for providing a mark,

said synergist being (i) present at at least 0.1% by weight of the pigment present in the polymer composition, (ii) heat stable at a temperature of at least T_p , and (iii) in physical proximity with the pigment.

17. An insulated conductor which comprises

- (A) an elongate wire, and
- (B) an insulating layer surrounding said wire, said layer comprising a composition which comprises
 - (1) a fluoropolymer having a processing temperature T_p ,
 - (2) 0.1 to 25% by weight of the composition of a colorless UV-absorbing pigment, and
 - (3) a synergist having the formula

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wherein

- (a) m is 1 to 3, n is 1 to 3, p is at least 1, and q is 0 to 3, and
- (b) at least one R or R' is a substituent that upon pyrolysis generates a black material suitable for providing a mark,

said synergist being (i) present at at least 10% by weight of the pigment present in the polymer composition, (ii) heat stable at a temperature of at least T_p , and (iii) in physical proximity with the pigment.

18. A conductor according to claim 17 wherein the composition comprises a perfluoropolymer.
19. A conductor according to claim 18 wherein the perfluoropolymer is PTFE.
20. A conductor according to claim 19 wherein the synergist comprises dodecaphenylsilsesquioxane.
21. A conductor according to claim 17 which, when exposed to an excimer laser at a wavelength of 308 nm and a fluence of 800 mJ/cm², produces a mark having a contrast of at least 70%.

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